Neighborhood Planning for Community Revitalization

Marcy-Holmes Neighborhood Environmental Profile

A CONSORTIUM PROJECT OF: Augsburg College; College of St. Catherine; Hamline University; Higher Education Consortium for Urban Affairs; Macalester College; Metropolitan State University; Minneapolis Community College; Minneapolis Neighborhood Revitalization Program; University of Minnesota (Center for Urban and Regional Affairs; Children, Youth and Family Consortium; Minnesota Extension Service); University of St. Thomas; and Minneapolis community and neighborhood representatives.

Marcy-Holmes Neighborhood Environmental Profile

by Jennifer Brown

July, 1994

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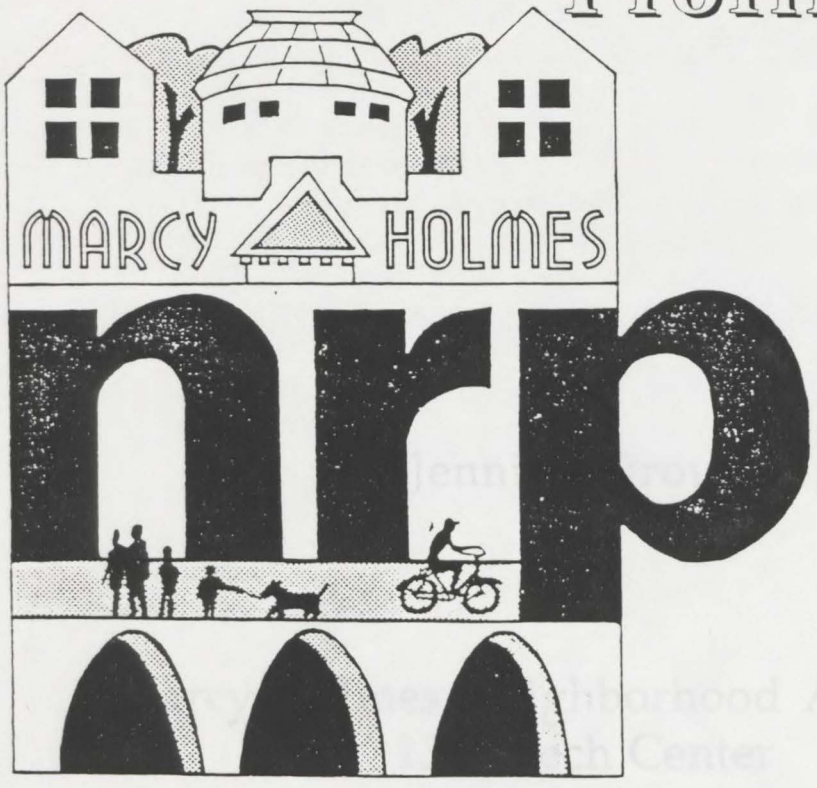
Marcy-Holmes Neighborhood

Environmental Profile



NEIGHBORHOOD REVITALIZATION PROGRAM

Summer 1994

Marcy-Holmes Neighborhood Environmental Profile

By

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Executive Summary

Marcy-Holmes Environmental Profile provides residents of the community with an in-depth compilation of the existing environmental conditions of their neighborhood. The following executive summary condenses information from the main body of the report as well as several recommendations.

The purpose of this environmental profile is to provide a detailed picture of the neighborhood's environmental conditions and any threats to this environment. The area studied by the profile includes the Marcy Holmes neighborhood and some select facilities outside the marked boundaries of the neighborhood which affect its environment. The profile was completed by cataloguing the relevant data from governmental and private organizations and placing it in an accessible format. This inventory can provide the necessary background and facts to facilitate the proper protection and improvement of the neighborhood's environment.

Facilities within this study area released more than three-quarters of a million pounds of toxic chemicals into the air, land, and water in 1992. Unfortunately, most of the laws and regulations meant to protect the community focus on permitting the pollution rather than reducing it. Once data is collected and firm understanding of the law is at hand, citizens can work to pressure and achieve this desired, and imperative, reduction in toxic chemical use.

The guide to the profile discusses some of the laws and basic requirements that regulate pollution by facilities in the neighborhood. It also gives some definitions of terms and more detailed explanation of how the information was obtained.

The overview is a numerical summary of the findings for a quick look at the neighborhood's statistics. Data collected includes a short description of the neighborhood's physical demographics and a catalogue of all of the regulated sources of pollution. For each facility, a more detailed summary shows business information, history of the facility's compliance with environmental regulations, and the Community Right-To-Know data. The overview helps to summarize the data and can be categorized in three areas: environmental resources, infrastructure, and regulated sources of pollution and water users.

Environmental Resources:

The profile shows two parks. Although there are no waterbodies present currently, several former waterbodies were in the area. There are no endangered species, but the urban habitat plays host to many animal species, including squirrels, raccoons, garter snakes, owls, and many types of songbirds. Tree species include maple, linden, and ash. Many native plant species also grow in the area.

Infrastructure:

A piece of track of the Burlington Northern Railroad runs on the edge of the neighborhood. Automotive traffic includes a segment of Interstate

35W and several high traffic streets, including University Ave and 4th Street SE.

Regulated Sources of Pollution and Water Users:

Information from ten different categories indicated 66 regulated sources of pollution and waters users in the neighborhood. The area includes facilities which have on record a total of eight air permits, two water permits, nine sewer permits, nine hazardous waste generators, five water users, and six sites designated as contaminated, including one Superfund Site. The largest category was the 16 facilities which reported storing chemicals on-site. There were nine Toxic Chemical Release Inventory (TRI) reporters which together created 762,159 pounds of toxic pollution in 1992.

Appendices:

Several maps put the information in a visually understandable context. One map gives a detailed picture of the neighborhood's infrastructure, major roads and former waterbodies. Another map shows the locations of the facilities and their proximity to sensitive populations indicated by the presence of schools, day care centers, and senior citizen facilities. The third map shows the Marcy-Holmes neighborhood's location in the center of a toxic corridor. This corridor is composed of eight Twin Cities' facilities located along the Mississippi River in Minneapolis and St. Paul. When plotted on a map, the two-mile circles surrounding these facilities form an interlocking chain that runs from North Minneapolis to the confluence of the Minnesota and Mississippi Rivers. Marcy-Holmes is affected by four of the eight facilities. At the end of the profile, an appendix of resources provides the address and phone numbers of agencies which may be helpful in obtaining further information or assistance.

Recommendations:

As mentioned above, it was very difficult to define distance parameters during this study due to the easily transportable nature of pollution. Because neighboring communities can affect each other in so many ways, it is important and necessary to work in cooperation with other neighborhoods. One way to begin this cooperative effort may be to join an organization such as the Mississippi Corridor Neighborhood Coalition, which is presently working on issues which affect the river, including non-point source pollution. As neighborhoods encounter and begin to solve problems in their urban environment, information about methods used and problems encountered should be shared so communities do not have to "reinvent the wheel."

Using this profile, neighborhood residents can begin to understand their neighborhood's environment and plan strategies for improvement. Several recent laws provide an excellent basis for incorporating communities into the pollution prevention process. Community groups can play a very strong role in influencing and encouraging pollution prevention.

One approach in utilizing this role could be to participate in The Good Neighbor Project. This is a mechanism for communities and companies to negotiate directly and focus on toxic pollution prevention. In this process,

neighbors sit down with local plant management and help set goals to eliminate pollution based on the pollution prevention planning process as required under the 1990 Minnesota Toxic Pollution Prevention Act (TPPA). By working with a local plant in the planning process, a Good Neighbor Agreement can be designed in which mutually agreed upon pollution reduction goals are set for the facility. Since TPPA does not provide for enforcement of the goals set by a company in its plan, community involvement offers the only real leverage available for holding a company to its stated goal. This positive proactive voice and pressure of the community can have beneficial impacts for the environment, as well as for relationships between residents and companies.

Several gaps in the legal and regulatory system governing pollution in Minnesota mean that many facilities may not be regulated. For example, under Toxic Release Inventory (TRI) requirements, a company is required to report only if it meets the following criteria: employs ten or more full-time employees, is assigned a Standard Industrial Classification (SIC) code between 20 to 39, and manufactures or processes 25,000 pounds or more per year, or uses 10,000 or more pounds per year of a TRI chemical. Because these reporting requirements are limited, only a small portion of the toxic chemicals emitted are actually reported. In addition, most commercial businesses and residents are not required to report under these laws and do not have to obtain any pollution permits, although they may produce and discharge pollution. The neighborhood could encourage these facilities "outside the system" to monitor and cut their levels of pollution and also urge government agencies for an expansion of reporting requirements.

With the base of information about the neighborhood's resources and facilities that has now been collected, it is necessary to continually update this information and be aware of changes or occurrences. In doing this, the community can provide a watchdog function through checking up on the regulatory system and tracking the progress of companies' pollution prevention plans, the companies' permit compliance, and government enforcement of laws following any violations. Much like a crime watch or block club, community-based pollution prevention can reinforce existing control measures. Some of the regulatory agencies have thousands of facilities to manage; a minimum of staff resources can turn enforcement into a bureaucratic process. A phone call or a expression of concern may be enough to get action from the company or the government.

There are also many environmental issues not discussed in this report which concern homeowners. Some of these issues include: pollution from radon, lead, and aesbestos; energy efficiency; and waste reduction. These were not included in this report due to the the study's emphasis on neighborhood-wide issues but nonetheless should not be forgotten.

I. Introduction

Marcy-Holmes Neighborhood is located in southeast Minneapolis in the University Community. The neighborhood began as part of the town of St. Anthony and has been strongly influenced by the neighboring University of Minnesota, housing many of its students, staff and faculty. Sitting between the downtown and the University, the neighborhood's urban environment has been strongly affected by city development.

The urban environment of the neighborhood is a product of, not only the natural ecological environment, but also the human behaviors and activities that impact the natural environment. It is important to recognize both the natural and human resources in the neighborhood and any threats to these resources.

Facilities within this study area released more than three-quarters of a million pounds of toxic chemicals to the air, land, and water in 1992. Unfortunately, most of the laws and regulations meant to protect the community focus on permitting the pollution rather than reducing it. Once data is collected and firm understanding of the law is at hand, citizens can work to pressure and achieve this desired and imperative reduction in toxic chemical use.

The purpose of this environmental profile is to provide a detailed picture of the neighborhood's environmental conditions and any threats to this environment. The profile discusses the physical demographics of the neighborhood, and gives a catalogue of all of the regulated sources of pollution. For each facility, a more detailed summary shows business information, history of the facility's compliance with environmental regulations, and the Community Right-To-Know data.

II. Guide to the Profile

This is a short explanation of information gathered: where it came from, what laws it is reported under, and why it is important.

Maps

The first pages of the appendices include four maps. The first map includes all the area's roads, green space, railroads, and former wetlands. The second map shows the location of the different facilities described in the profile, and together with schools, child-care facilities, and healthcare facilities are in relation. The third map shows the entire metropolitan area and places the neighborhood in context with the cities as a whole. It also notes the placement of the toxic corridor. The last map shows storm water drainage patterns. The Public Works Department created the original maps.

A. Resources

Waterbodies:

Although no existing waterbodies, such as streams, creeks, or lakes subsit today, the presence of former water bodies are identified. These were located by comparing a series of maps at the Minnesota Historical Society. It is important to look at former waterbodies because these are a part of our natural systems which were destroyed by the first round of development. Reclaiming these areas and restoring them to their original state would allow them to play an important role in filtering precipitation runoff, increasing plant and animal wildlife, and improving the area's quality of life.

Climatology:

This is a summary of pertinent meteorological data obtained from the National Weather Service for their reporting station in the Twin Cities. Temperature was chosen to provide a loose representation of local weather. Precipitation and wind information were chosen primarily due to their roles in the transport of pollutants by significantly impacting where pollutants are transported and deposited and how rapidly this occurs.

B. Infrastructure

Traffic:

The Minneapolis Public Works Department provided automobile traffic flow counts. These counts show the number of vehicles that might be expected to pass a location daily, averaged over the year. Vehicles can be a major source of air pollution. Carbon monoxide, hydrocarbons, and nitrogen oxides contribute to lower atmospheric ozone formation (smog). However, an engineer at the MPCA explained that recent improvements in emission testing on vehicles have helped to lower harmful pollutants.

Railroads:

Active railroad tracks are identified, along with major uses of the tracks. This information was gathered from Burlington Northern Railroad.

Storm water discharge:

As a part of its permitting process under the federal Clean Water Act, Minneapolis has compiled a Storm Water Outfall Inventory which tracks every drop of water that falls in the city to the river or lake where it ends up. The Department of Public Works compiled the data on the pipes and outfalls. Each pipe is identified along with the drainage area that it feeds into, the acreage drained by each pipe, and the types of land uses in that area. The outfall is the area of land which drains into one or more pipes. This information is especially important for neighborhoods like Marcy-Holmes, which are located so close to the Mississippi River, and could affect it with non-point source pollution or storm runoff from urban streets. It is crucial to keep in mind that all our water resources-- lakes, creeks, groundwater and the Mississippi-- are all part of a single hydrological cycle. What affects one part of the cycle has the potential of affecting all others. This is one reason why it is important to manage water resources on a watershed basis. The watershed is the natural drainage pattern of the land. Non-point source pollution is runoff from urban streets and lawns. The maps of the outfalls in the Marcy-Holmes neighborhood show that all of the outfalls eventually drain into the Mississippi River watershed. Any pesticides or fertilizers used on the lawn, oil draining from autos, chemicals used in the home may be picked up by rain falls and melting snow and be carried via storm drains to surface water. Whereas the affect of one household may be small, the collective pollution impact of a neighborhood can be substantial.

C. Facilities

Business Information:

Business information was compiled from several business and manufacturer directories (see Appendix L). Information about ownership, parent company, number of employees and yearly sales is included. This information may be helpful in getting a better picture of the facility and when further researching their environmental record. Standard Industrial Classification (SIC) codes describe the type of manufacturing done at a facility. Company contacts are also listed and could be a useful source in obtaining further information specific to that facility or in expressing neighborhood concerns.

Community Right-To-Know Data

Community Right-To-Know-Data is included for all facilities. Community Right-to-Know Data includes Toxic Release Inventory Reporters (TRI), chemicals stored on-site, and accidental releases. These are reported under the federal Emergency Planning and Community Right to Know Act (EPCRA), section III of the 1986 Superfund Amendments and

Reauthorization Act (SARA). It is commonly referred to as the Community Right to Know Act. The law is intended to inform the public about chemical hazards in their communities and improve emergency planning for chemical accidents.

Toxic Chemical Release Inventory (TRI):

Section 313 of EPCRA requires manufacturers with more than ten employees to report their emissions to air, land, and water of over 300 toxic chemicals. This data is known as the Toxic Chemical Release Inventory (TRI). The manufacturers also report chemicals shipped off-site for treatment or disposal and any accidental releases. They report to the ERC and the U.S. Environmental Protection Agency (see Appendix L for more information). Facilities report their data in terms of pounds released or transferred off-site to six different destinations or media (see Appendix G). The data tell communities what toxics they may be exposed to on a regular basis, in what amount, and by which pathways. This knowledge, coupled with information on known potential health effects of toxic chemicals, gives a basic understanding of the toxic chemical users in each neighborhood. Manufacturers must report annually if a facility meets the following criteria: has a Standard Industrial Classification (SIC) code between 20-39; employs ten or more full-time employees; and manufactures or processes 25,000 pounds or more per year, or uses 10,000 pounds or more per year, of a TRI chemical. Because reporting requirements are limited, only a small portion of the toxic chemicals emitted are actually reported.

Known Potential Human and Environmental Effects of TRI Chemicals:

Toxicity charts contained for each TRI reporter summarize information on the known potential effects of the chemicals. A toxic chemical's known potential human and environmental effects means that an exposure to a certain chemical potentially results in, or is reasonably anticipated to result in, a particular health or environmental effect. That a chemical is not marked for a certain effect does not mean it is not associated with that effect; instead it indicates that supporting data is not available or did not support sufficient evidence. There are 10 health and environmental effects listed (see Appendices F and H for definitions and more specific information about each chemical.) Because toxicology, the science of poisonous substances, is still developing, information is not available on all the health effects of all chemicals in use.

While chemical risk involves both the toxicity of a substance and the magnitude and duration of exposure, TRI data provides information of the magnitude of exposure only. Thus, the TRI releases directly to air, water, and land and the transfers to public sewage and other off-site locations in 1992 are not an indicator of human and environmental exposure to the chemicals or non-compliance with environmental regulations. Many other factors which can affect the degree of a chemical risk, such as distance from a pollution source or a person's individual sensitivity or pre-existing medical conditions.

Due to these complicating elements, it is difficult to determine the actual effects of the pollution produced by a particular company.

More information about toxic chemicals can be obtained from: Hazardous Substance Fact Sheets, prepared by the New Jersey Dept. of Health (available at the ERC) and Material Safety Data Sheets (MSDS) which OSHA (Occupational Safety and Health Administration) created to protect workers from chemical hazards. Manufactures of the chemicals or products prepare the MSDS's and provide information about hazards associated with substance and any precautions that should be taken to avoid these hazards.

Chemicals Stored On-Site:

Under sections 311 and 312 of EPCRA, both manufacturing and non-manufacturing facilities must submit reports on their inventories of hazardous chemicals for the preceding year to the ERC and local fire department. These reports, sometimes referred to as Emergency and Hazardous Chemical Inventories, require the following information: types of substances by hazard category, such as immediate (acute) health hazards and fire hazards; amounts of hazardous chemicals stored; and locations of hazardous chemicals in storage. Reporting for chemicals stored on-site is limited to chemicals designated as hazardous under the Hazard Communication Standard of the Occupational Safety and Health Act (OSHA) which are stored in excess of the minimum reporting levels. OSHA was enacted in 1970 to improve working conditions. Reporting thresholds vary between hazardous chemicals and Extremely Hazardous Substances (EHS). Hazardous chemicals not on the EHS list require reporting if stored in excess of 10,000 pounds. An EHS's minimum reporting threshold is 500 pounds or a chemical-specific threshold Planning Quantity, whichever is less. The EHS list is actually a subcategory of hazardous chemicals defined by OSHA, and currently contains about 360 chemicals which could cause serious human health effects from short-term exposures. Any facility that houses EHS chemicals beyond the threshold amount must have an emergency plan which details likely routes for EHS transportation. Facilities report the storage information in ranges of amounts. The profile, distinguishes between a facilities storage of EHS chemicals and others and the identification of chemicals and range of amount stored is listed.

Accidental Releases:

Facilities are also required to report any 304 releases, accidental releases or spills of chemicals, if they exceed reportable quantity thresholds. If a release occurs, the proper authorities must be notified and written follow-up is filed at the ERC.

Pollution Progress Reports:

Another important piece of legislation to consider is the 1990 Minnesota Toxic Pollution Prevention Act (TPPA). Under this act, facilities which report TRI releases are required to develop pollution prevention plans

outlining their efforts to reduce or eliminate toxic chemical pollution. While the pollution prevention plans are not available for public review, one can look at the company's pollution progress reports. The reports include a summary of progress made during the last year; explanation, if needed, why objectives were not met; and objectives for progress in the near future. The 1992 Progress reports were used for this report and can be found in the Environmental Analysis division of the MPCA.

Environmental Regulation

The history of regulation notes what permits a facility may have and pertinent information collected from those files. Each facility was tracked for water permit, air permit, sewer permit, sewage permit, hazardous generator license and water usage permit. Each facility with a permit has a file at the appropriate agency containing copies of the permit, correspondence, inspection records, citizen complaints, enforcement actions and any pertinent articles or documents. Confidential information is removed, but the files are all available for public review by appointment at the appropriate agencies.

The regulatory section includes the following information about the permit, if appropriate: Permit Number, issue and expiration date, regulated pollutants, number of pollution points, and any enforcement activity. This information can be useful snapshot of a facility's record and provides data necessary to obtain more information and track the permits in the future.

Expiration and issue dates are included because there is a period for public comment when these permits are issued or re-issued. While air, water, and sewer permits do not regulate all pollution from a facility, they do specify which pollutants can be discharged in what concentration. Hazardous wastes are regulated in broad categories, which include many different types of waste mixed in one drum. For that reason, specific pollutants are not listed for each facility. Reporting requirements vary for air, water, and sewer, but most require monitoring and reporting on a monthly, quarterly, or annual basis. Hazardous waste generators are required to file a manifest for each shipment sent off-site.

The enforcement actions looked at in this report were Notice of Violations (NOV), Administrative Penalty Orders (APO) and Stipulated Agreements. These are listed in order of increasing severity. A NOV is the first warning of a violation at hand and notes what is wrong. An APO sets a fine and conditions for returning to compliance. Stipulated Agreements are legal documents made by the facility and regulating agency which set specific conditions which must be met and fines which must be paid for a company to continue business.

Pollution points differ for each source. All air permits allow pollution to be discharged into the atmosphere, so the number of emission units are recorded. Designated waters to which a water or sewer discharge is permitted is listed. The destination of each hazardous waste shipment is available but, due to the incredibly large range of destinations, they are not listed.

Contrary to popular perception, permits issued under the federal Clean Water and Clean Air Acts do not stop pollution. Instead, facilities are given permission to pollute a specific amount. Only when this amount is exceeded, is there a violation. Hazardous Waste is regulated by the Resource Conservation and Recovery Act (RCRA). Under the RCRA, the amount of hazardous waste produced is not limited. Rather, companies are required to get a generator license, report annual amounts and types of waste generated, estimate the amount of waste which will be produced in the coming year, and document wastes shipped for disposal. While any production (small or large) of hazardous waste is required to be reported, the permitted facilities in the other catagories of evironmental regulation are primarily industrial, and do not include commercial or residential inputs.

Air Permits:

The MPCA has the authority to issue air permits to facilties under the federal Clean Air Act. Permits cover the following types of pollution: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. A TRI reporter with air emissions may not have an air permit because only large manufactures are required to report under Community Right to Know, so many facilities may have permits but not report toxic pollution.

Presently, the air quality division of the MPCA is under reorganization. As dictated by the new requirements of the Clean Air Act Amendments, all facilities requiring permits will be reissued in 1995. Because the division is in this transitional period and in order to avoid unecessary paperwork, only absolutely obligatory permits are reissued at this time. If a facility's permit has expired, it may operate under the requirements of this permit until the new one is reissued in 1995; all of the same emission limits and monitoring requirements apply.

Hazardous Waste Licenses:

Generators of hazardous waste are required under the federal Resource Conservation and Recovery Act (RCRA) to file a manifest, or shipping paper, for each shipment of waste. All generators, small and large, are required to report. RCRA is the set of "cradle to grave" regulations for hazardous and non-hazardous solid waste. A license is an authorization to operate a hazardous waste generating facility in accordance with management plans. This data is compiled by the Environmental Management division of Hennepin County.

Water Permits:

The MPCA permits water polluters as part of its authority under the federal Clean Water Act. These National Pollution Discharge Elimination System (NPDES) permits limit the amount of pollution that can be discharged. They also require periodic measurement and analysis of wastewater to determine if the limits are being met. Permits are given for

discharges of water use in activities such as manufacturing, non-contact cooling, or dredging operations. Polluted groundwater, or leachate, is also discharged under these permits. Some water polluters may discharge through the sewer system rather than directly to the Mississippi River.

Sewer Permits:

The Metropolitan Waste Control Commission has permitting authority under the federal Clean Water Act to permit industrial users to discharge through the municipal system. The industrial users get permits to discharge certain levels of pollutants, and monitoring is required.

Groundwater and Surface Water Users:

Information on the users of ground and surface water comes from the DNR's list of Water Appropriation Permits. The information includes where the water is taken from, how much is used, and for what purpose it is used.

Contaminated Sites:

These sites are generally polluted acreage and buildings. A chemical spill or leak from an underground or above ground storage tank may cause soil and/or grounwater contamination. Depending on the severity of the contamination, they may be classified under the following programs. Permanent List of Priorities (PLP) is a state listing of verified hazardous waste sites which pose a threat to public health or the environment and are priorities for clean-up. Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is the EPA database of potential or actual hazardous waste sites nationwide. The act establishes a program to deal with the release of hazardous substances in spills and from inactive or abandoned disposal sites. Superfund sites, established under the same act, are sites designated to receive state and federal funding for hazardous waste clean up. Minnesota created in 1987 the Petroleum Tank Compensation Fund (Petrofund) to encourage tank owners to clean up contaminated soil and groundwater resulting from underground storage tank leaks.

III. Overview of Findings

A. Environmental Resources

There are 2 parks located within the neighborhood.

There are no existing waterbodies in the neighborhood currently but there was formerly an area which used to be marshland and there were two small creeks which ran through the center of the neighborhood.

The habitat of the neighborhood supports several species of animals and plants. Animals include squirrels, skunks, raccoons, garter snakes, owls, and many variety song birds. Native tree species have been planted by the Minneapolis Board of Parks and Recreation and include maples, lindens, and ash.

B. Infrastructure

There is a piece of track of the Burlington Northern Railroad running on the northeast boundary of the neighborhood.

The profile includes traffic counts for the busiest streets. The study area includes a section of Interstate 35W running through the center of the neighborhood. Traffic flows are highest on the highway, University Ave. and 4th St. SE.

A total of 11 pipes feed water into 12 outfalls. Pipe sizes range from 8" to 84".

The neighborhood contains 2 schools, 5 child care facilities, and 2 senior citizen facilities.

A total of 8,810 people live in the Marcy-Holmes neighborhood. 6.4% of the people is made up of sensitive populations (those younger than 5 or older than 65) and 17% of the population is people of color.

C. Facilities

There are 66 regulated sources of pollution and water users listed in the environmental profile. This includes information from ten different categories.

There are a total of nine TRI reporters in the study area. Sixteen facilities reported storing chemicals on site as part of their community right-To-Know data. There were two facilities which reported accidental releases during the 1992 reporting period.

There were eight facilities with air pollution permits, two of these facilities are operating under expired permits. Nine of the regulated facilities were hazardous waste generators. There are two facilities regulated for water pollution. Both facilities have small non-contact cooling water discharge with very little impact to the river.

Nine facilities were identified as permittees discharging to the sewer system. There were five ground water users. Six sites were considered to be contaminated: four were leak sites, two were on the states PLP and one is categorized as a Superfund Site.

IV. Data Tables

A. Environmental Resources

Parks: Holmes Park located at 5th St. SE and 3rd Ave
Marcy Neighborhood Park located at 7th St. SE and 11th Ave.

Water bodies: No waterbodies are present in the Marcy-Holmes neighborhood at this time. A historic map from the 1840's revealed that while most of the neighborhood was formerly prairie land, the southeastern portion of the neighborhood was marsh and additionally there were two small creeks which ran from the Mississippi River and up northward through the center of the neighborhood (see Appendix- Map 1).

Plant and Wildlife Populations: No endangered species have been identified in the study area. There has been reported presence of deer, woodchucks, squirrels, skunks, raccoons, beavers, garter snakes, fox snakes, and many raptors, including owls and several species of hawks. Animal sightings reported by private citizens includes great blue heron, ducks, geese and many types of songbirds.

Trees planted and maintained by the Park Board include the following species: Sugar Maple, Norway Maple, Red Maple, American Linden, Little Leaf Linden, Bur Oak, Green Ash, honey Locust, Ginko, and Amelanchier.

B. Infrastructure

Railroad: A piece of railroad travels between 9th Street SE and Van Cleve Park forming part of the western border of the neighborhood. This track is operated by the Burlington Northern railroad. It is used for commodity transport purposes of coal, grain, lumber, etc. . .

Streets: 35W-96,000- just south of Broadway
108,000- btwn. 8th and 4th St. SE
113,000- across the river
E. Hennepin- 8,540- north end of Marcy
North Bridge- 9,610- northbound, head of Hennepin Bridge
8,100- southbound, First Ave NE
Central- 16,750- Across River
11,650- At Central and Hennepin- Western Edge of Marcy
University- 10,900- at Central University and 4th St. Combined
16,170- at 6th Ave 13,045- after Oak St.
21,770- at 35W
14,800- at 15th Ave

4th St. SE- 10,230- at Central
13,340- at 6th Ave
20,020- at 35W
15,990- at 11th Ave
10th Ave SE- 11,000- Bridge across river
7,620- North of 4th St.
5,600- North of Como
8th Ave SE- 3,340- East of 35W
3,080- West of Hennepin
2nd St. SE- 2,170
1,470- at 11th Ave SE
15th Ave SE- 12,030- north of 4th St.
14th Ave SE- 1,490- north of 4th St.
*Below 500 is not listed

Numbers indicate the average daily traffic amounts for the said location. The amount of emissions from an automobile is dependent upon speed, Carbon monoxide emissions are highest at lower speeds. Emissions decrease in conjunction with rising speeds until they begin to rise again at very high speeds (>55 mph). Emissions are normally worse at intersections where cars are constantly accelerating and decelerating at low speeds but, according to records at the MPCA, none of the intersections within the Marcy Holmes Neighborhood are at an elevated level.

Storm Water Drainage pipes: A total of 11 pipes feed water into 12 outfalls. Pipe sizes range from 8" to 84". See attached appendices for the complete numerical data and the dimensions and location of each pipe and outfall.

Buildings:
Schools: Marcy Open School, Heart of the Earth Survival School
Child Care Facilities:
Children's Home Society
Children's World/Learning Tree
Eastside Child Dev. World
Little Haven Nursery School
Minneapple Int'l Montessori
Minneapolis. Kids-Marcy
Senior Citizen Centers: MCDA operated housing for the elderly, Labor Retreat Apartments

Climatology: The average annual temperature for the Twin Cities is 44.7 degrees F with extremes ranging for 105 degrees F to -34 degrees F. Average annual minimum and maximum temperatures are 35.2 degrees F and 54.2 degrees F, respectively. The average yearly precipitation is 26.36 inches. The prevailing wind direction was from the northwest with an average wind speed of 10.6 miles per hour. Wind directions are primarily southeasterly

during June through October and northwesterly from November through April.

Demographics: Population in 1990: 8,810
Race ethnic: white 84.3%
Asian/American: 9.5
African American: 4.5
Hispanic: 2.2
Native American: 0.8
Age of sensitive populations: 1.8 % of households have children under 5
4.6 have 65 and over

C. Facilities:

ADM/TPC Milling: 335 Main St., 55414

Business Information

SIC: 2041 (Flour Milling) Facility was formerly named The Pillsbury Company (A Mill).

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	3
Maximum Amount Stored (Range in lbs.)	N/A	101,100-1,010,997

Chemicals: Chlorine, Methyl Bromide, Propane

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
ADM/TPC MILLING JENADM

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Bromoethane (Methyl Bromide)	15,470	0	0	0	0	0	15,47
TOTALS	15,470	0	0	0	0	0	15,47

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Bromoethane (74-83-9)					X		X			

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	N/A	N/A	381	N/A	756286-1
Issue Date:	N/A	N/A	9/1/91	N/A	Every yr
Exp. Date:	N/A	N/A	8/31/94	N/A	Every yr
Regulated Pollutants:	N/A	N/A	N/A	N/A	Permitted Use: 42 mill/gal/yr
Enforcement Activity:	N/A	N/A	NOV- 2/94 NOV- 8/92	N/A	N/A
Pollution Points:	N/A	N/A	Mississippi River	N/A	Use Source: Mississippi R.

Notes:
N/A = Not Applicable

American National Can Co: 150 26th Ave SE, 55414 Phn: 378-3300

Business Information

This company's principle activity is the production of flexible packaging. Ownership: Chicago owned through Pechiney Intl. (4755 Steamboat Rd Greenwhich Conneticut 06836) by Pechiney S.A., Paris Employees: 185, Annual revenue: 48M

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	2
Maximum Amount Stored (Range in lbs.)	N/A	110,000-1099,998

Chemicals: Lacquer Thinner, Propane

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
AMERICAN NATIONAL CAN CO JENANC

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Methyl Ethyl Ketone (MEK)	20,460	37,997	0	0	0	69,656	128,1
Toluene	39,383	73,139	0	0	0	36,342	148,8
Zinc Compounds	0	0	0	0	0	0	
TOTALS	59,843	111,136	0	0	0	105,998	276,9

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Methyl Ethyl Ketone (78-93-3)			X	X		X	X			
Toluene (108-88-3)			X	X				X		
Zinc Compounds (7440-66-6)								X		

Pollution Progress Report

The company uses methyl ethyl ketone and toluene for cleaning and production process. Reductions are being made using substitutes based on non-TRI chemicals or are in the process of being researched. Specific numeric data on reductions are not available because production process and reporting does not allow for an easy method to accurately determine how much chemical is released specifically for each process.

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	2144-87-OT-1	MN057011	566	05302840	756236-1
Issue Date:	4/30/87	4/20/94	2/1/91	4/1/94	Every yr
Exp. Date:	4/2992	12/31/97	11/30/94	12/31/94	Every yr
Regulated Pollutants:	PM. SO_2, NO_x, HC, TSP, CO	Non-contact cooling water	N/A	N/A	Permitted Use: 96 mill/gal/yr
Enforcement Activity:	LOW 7/92, NOV 6/94	N/A	NOV- 2/86, NOV- 8/88 NOV-2/90, NOV- 8/91 Stip. Agreement- 9/90	N/A	N/A
Pollution Points:	22 emission pts	Mississippi River	Mississippi River (via storm sewer)	N/A	Use Source: Mississippi R.

Notes: American Can received notice of violation (NOV) from the air quality division of the MPCA due to their failure to conduct required performance tests; notice, also, gave a reminder of their history of odor complaints. They have presently an expired air permit but they are operating under its requirement and should be renewed in 1995. American Can installed a pH neutralization system in 1991 to comply with the stipulated agreement with Metropolitan Waste Control Commission. Good Neighbor Project talks have taken place with American Can and Prospect Park; while they have been receptive to the talks, future progress is unsure.
N/A = Not Applicable

American Spirit Graphics Corp: 801 9th St. SE, Phn: 623-3333, Fax: 623-9314

Business Information

This facility uses high quality four-color commercial web printing, heat set presses and dryers to produce newspaper advertising supplements. SIC: 2721 (Commercial Printing) CEO: Suzanne L. Miller Ownership: Corporation Employees: 110 Annual revenue: $20.3 M

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	703A-93-I/O-1	N/A	773	05300712	N/A
Issue Date;	8/25/93	N/A	3/1/92	2/1/94	N/A
Exp. Date:	5 yrs.	N/A	2/28/95	12/31/94	N/A
Regulated Pollutants:	PM, NO_x, HC, CO	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	NOV 8/89, NOV 2/90 NOV 8/90	N/A	N/A
Pollution Points:	3 emission pts.	N/A	Mississippi River	N/A	N/A

Notes: There was an odor complaint about visible emissions in 1990. MPCA inspection revealed high opacity/odor and concluded it was most likely due to sporadic misoperating of control equipment; no violations were given. Complaint in 1/94 concerning leak of antifreeze from frozen chiller; company cleaned up spill to the best of their abilities. Notices of violation issued for sewer permit are "paper" violations for filing past deadline.
N/A = Not Applicable

Amoco Oil SS #6278: 1000 University Ave. SE 55414, Phn: 331-2244

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	1
Maximum Amount Stored (Range in lbs.)	N/A	100,000-999,999
Chemical: Gasoline		

Tank Leak Site

Leak Id #7118 The release of gasoline from storage tank facilities was discovered on 12/29/93. There is a suspected release of hydrocarbons based on measurements detected in the soil during sampling at this location. The preliminary investigation indicated a limited groundwater impact from the hydrocarbons. The MPCA recommended further monitoring of the site.

Bunge Corp/Midway Elevator: 917 13th Ave SE

Business Information

This facility is a grain terminal elevator. The terminal arranged into 3 major storage areas, supported by a main workhouse. Grain is received and shipped at the facility by trucks and rail cars. SIC: 5153 (Grain Storage Elevator)

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	393B-90-OT2	N/A	N/A	N/A	N/A
Issue Date;	11/1/90	N/A	N/A	N/A	N/A
Exp. Date:	5 yrs.	N/A	N/A	N/A	N/A
Regulated Pollutants:	TSP, PM	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	N/A	N/A	N/A
Pollution Points:	4 emission pts.	N/A	N/A	N/A	N/A

Notes:
N/A = Not Applicable

Busch Industrial Prod/Fleiscmann's: 770 Kasota Ave SE 55413
Chemicals Stored On-Site

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	1	0
Maximum Amount Stored (Range in lbs.)	10,000-99,999	N/A
Chemicals: Formaldehyde Solution		

Chateau Community Housing Association: 425 13th Ave SE 55414, Phn: 331-3919

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	1
Maximum Amount Stored (Range in lbs.)	N/A	10,000-99,999
Chemicals: Fuel Oil		

Tank Leak Site

Leak Id #7178 The release of fuel oil (#2) was discovered on 2/4/94 by observation through cracks in asphalt. The MPCA notified the facility of their legal obligation; no action has been completed as of yet.

Chem Serv, Inc.: 715 8th St. SE 55414, Phn: 379-4411, Fax: 379-8244

Business Information

SIC: 2099 (special Food additives), 2841 (Detergent Bases), 2865 (Pigments and Dyes), 3069 (Plastic drums, plastic pails) Chair: Elizabeth Fischman Ownership: Corporation Employees: 100-249 Sales: $10M and above

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	1	6
Maximum Amount Stored (Range in lbs.)	10,000-99,999	60,000-5,999,994

Chemicals: Ammonium Lauryl Ether Sulfate, Ammoinum Thiogylcolate (Aqueous Solution), Benzalkonium Chloride, Gycerol Monothioglycolate, Hydrogen Peroxide (40 to 50%), Thioglycolic Acid, Trisodium Nitrilotriacetate (NTA NAB Monohydrate)

City Maintenance East Side Yard 935 5th Ave. SE 55414, Phn: 788-9033

Tank Leak Site

Leak Id #2207. The release of gasoline was discovered on 1/19/90 from a leaking storage tank during a tightness test. The tank has been emptied and arrangements are being made to have it removed. No tests for contamination have been done.

Dresser-Rand/Electric Machinery: 800 Central Ave SE, 55413, Phn: 378-8000, Fax: 378-8050

Business Information

This facility manufacturers motors and generators. SIC: 3612 (Motors/Generators) Ownership: Publicly owned regional company, Joint owners Dresser Industries, Dallas and Ingersol-Rand Co, Woodcliff Lake NY through Dresser-Rand Co, Corning NY and Dresser Rand A/S, Konigsberg, Norway VP/GM: Paul T. Butzburger Employees: 330

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	8
Maximum Amount Stored (Range in lbs.)	N/A	170,000-1,699,992

Chemicals: 1, 1, 1- Trichloroethane, 100% Reaction Products of Epichlorohydrin and Bisphenol, Diesel Fuel No. 2, Lube Oil Solvent Refined Heavy Paraffinc Oil, Methyl Tetrahydro Phthalic Anhydride (MITHPA), Oxygen (Refridgerated liquid)

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
DRESSER RAND/ELECTRIC MACHINERY JENDRESS

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
1,1,1-Trichloroethane	2,000	74,000	0	0	0	0	76,000
Copper and Compounds	5	5	0	0	0	0	10
TOTALS	2,005	74,005	0	0	0	0	76,010

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Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (systemic) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
1,1,1-Trichloroethane (71-55-6)			X	X				X		X
Copper Compounds (7440-50-8)			X	X				X		

Pollution Progress Report

Emissions of 1,1,1- Trichlorethane were reduced by process and product substitution eliminating the need for this chemical, which was used in cleaning and manufacture. Copper emissions were not reduced because there is no known substitute. The emissions are at a very low level and the emissions are being slightly reduced by the addition of new dust collection system. The scrap copper materials are collected and recycled.

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	348-93-P-1	N/A	451	05304820	N/A
Issue Date;	6/8/93	N/A	6/1/93	1/1/94	N/A
Exp. Date:	5 yrs.	N/A	5/31/96	12/31/94	N/A
Regulated Pollutants:	TSP, CO, SO_2	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	NOV 2/91, NOV 3/92 NOV 8/92	N/A	N/A
Pollution Points:	59 emission pts.	N/A	Mississippi River	N/A	N/A

Notes: Electric Machinery installed coolant recycling equipment in 10/92 to address concerns of the Metropolitan Waste Control Commission of high zinc levels.
N/A = Not Applicable

Holiday Stationstore #9 107 6th St. SE 55405

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	1
Maximum Amount Stored (Range in lbs.)	N/A	10,000-99,999
Chemicals: Gasoline		

Jones Lumber Co:

Business Information

This is a lumber sawing and planing facility. SIC: 2421 (Lumber sales)

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	1777-90-OT-1	N/A	N/A	N/A	N/A
Issue Date;	3/1/90	N/A	N/A	N/A	N/A
Exp. Date:	5 yrs.	N/A	N/A	N/A	N/A
Regulated Pollutants:	TSP, PM	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	N/A	N/A	N/A
Pollution Points:	1 emission pt.	N/A	N/A	N/A	N/A

Notes:
N/A = Not Applicable

Manildra Milling: 401 Main St. SE, Phn: 332-2778, FAX: 331-2368

Business Information

SIC: 2046 (wheat starch), 20116 (wheat gluten) Ownership: Corporation
VP: Robert J Parnow Sales: $10M and up

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	2409-91-OT-1	N/A	251	N/A	N/A
Issue Date;	7/25/91	N/A	4/1/94	N/A	N/A
Exp. Date:	5 yrs.	N/A	3/31/97	N/A	N/A
Regulated Pollutants:	TSP, NO_x, CO HC, PM	N/A	N/A	N/A	N/A
Enforcement Activity:	2 NOV- 12/92	N/A	NOV 1/85 NOV 5/91	N/A	N/A
Pollution Points:	5 emission pts.	N/A	Mississippi River	N/A	N/A

Notes: MPCA air quality division issued two notices of violation (NOV) in 12/92 regarding excessive and visible emissions from two emission points; Manildra returned to compliance as of 4/94. Metropolitan Waste Control Commission issued "paper" violation for late filing in 5/91.
N/A = Not Applicable

McLaughlin Gormley King Company: 1715 5th St. SE, 55414, Phn: 544-0341, FAX: 544-6437

Business Information

This facility manufactures natural and synthetic pyrethroid (halogenated and non-halogenated) insecticides and insect repellents; insect-growth regulators; and dog, cat, and deer repellents SIC: 2879 (Insecticides and Repellents) Ownership: Privately owned corporation Chair: William Gullickson Jr. Employees: 55 Annual Revenue: $39 M

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	11
Maximum Amount Stored (Range in lbs.)	N/A	200,000-1,999,989

Chemicals: Carbon, Crude Pyrethrum Extract, Isochinchomeronic Acid, Methanol, Methylene Chloride, Mineral Spirits (Odorless), Petroleum Distillate, Propyl Alochol, Refined Pyrethrum Extract, Repellant 326, Toluene

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
MCLAUGHLIN GORMLEY KING CO jenmgk

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Methanol	16,000	17,000	0	0	0	26,000	59,0
Toluene	1,800	1,900	0	0	11	3,400	7,1
TOTALS	17,800	18,900	0	0	11	29,400	66,1

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Methanol (67-56-1)							X			
Toluene (108-88-3)			X	X				X		

Pollution Progress Report

At the time the report was filed MGK was in the process of redesigning their production facility. Due to this, they were not able to set specific reduction goals but would so for toluene and methanol once preferred technology was chosen.

Accidental (304) Release

MGK reported a release on Apr. 13, 1989 of 14 lbs. of Pyrethins into the sewage. Material was released from leaking drums. Pyrethins are quite toxic to fish but degrade rapidly and are considered to be non-toxic to humans. Actions were taken to contain the release.

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	N/A	N/A	237	053090	N/A
Issue Date;	N/A	N/A	3/1/94	1/1/94	N/A
Exp. Date:	N/A	N/A	2/28/97	12/31/94	N/A
Regulated Pollutants:	N/A	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	NOV 1/83, NOV 2/89 APO 5/89, NOV 2/92	APO 8/91, NOV 8/91 Stip. Agreement 2/93	
Pollution Points:	N/A	N/A	Mississippi River	N/A	N/A

Notes: Metropolitan Waste Control Commission issued an administrative penalty order (APO)in 5/89 concerning a pesticide release incident. MGK is contesting the requirements in court. MWCC issued a notice of violation (NOV) in 2/92 concerning a discharge of a prohibited flammable waste to the Metro Disposal system. MPCA hazardous waste division gave a NOV in 8/91 after an inspection revealed stained soil and lack of vegetation underneath an outlet valve used to drain a hazardous waste storage tank; company maintains no spill occurred. MPCA issued an APO for violations found during inspection in 8/91. MGK and the MPCA entered into a stipulated agreement in 2/93. This site was placed on Minnesota's Permanent List of Priorities in 12/90 for contamination of soil and groundwater. Investigation by the MPCA in 1981 showed a presence of acetone and benzene in the monitoring well and methyl ethyl ketone in MGK's supply well. Levels in the wells were monitored; no potable (drinkable) wells were impacted. A groundwater system and gradient control groundwater pomp out system were installed. The site has a very low hazard since the possibility of contaminants from this site affecting a drinking water well are unlikely. The company samples and monitors quarterly and has petitioned to be removed from the list.
N/A = Not Applicable

Metallurgical, Inc.: 900 Hennepin Ave E., Phn: 378-1500, FAX: 378-0462

Business Information

SIC: 2879 (Insecticides and Repellents) Ownership: Publicly owned regional corporation, Subsidiary of Thermo Process systems Inc., Livonia MI, subsidiary of Therma Electron Corp, Waltham MA President: John Wielgosz Employees: 75 Annual Revenue: $5M

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	3
Maximum Amount Stored (Range in lbs.)	N/A	12,000-119,997

Chemicals: Diesel Fuel, Mineral Spirits, Propane

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
METALLURGICAL, INC. jenlurg

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Ammonia	0	3,600	0	0	0	0	3,600
TOTALS	0	3,600	0	0	0	0	3,600

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Ammonia (7662-41-7)					X	X			X	

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	N/A	N/A	N/A	05309570	660994-1 660994-2
Issue Date;	N/A	N/A	N/A	1/1/94	Every yr
Exp. Date:	N/A	N/A	N/A	12/31/94	Every yr
Regulated Pollutants:	N/A	N/A	N/A	N/A	Permitted (ea): 300 mill/gal/yr
Enforcement Activity:	N/A	N/A	N/A	N/A	N/A
Pollution Points:	N/A	N/A	N/A	N/A	Use Source: Mississippi R.

Notes: Metallurgical has two water use permits.
N/A = Not Applicable

Metal-Matic: 629 2nd St. SE 55413, Phn: 378-0411, FAX: 378-0012

Business Information

This facility manufactures welded steel tubing. SIC: 3317 (Steel tubing) Ownership: Privately owned corporation CEO: G.J. Bliss Sr. Employees: 425 Annual revenue: $65M

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	6
Maximum Amount Stored (Range in lbs.)	N/A	321,000-3,209,994

Chemicals: Ammonia (Anhydrous), K-3 Salt, Nitrogen (Refriderated Liquid), Oil (Quench), Propane, Thermo Quench Salt

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
METAL-MATIC, INC. jenmeta

Chemical name	Air	Air	Land	Water	Sewer	Offsite	Totals
Sulfuric Acid	0	0	0	0	0	0	0
TOTALS	0	0	0	0	0	0	0

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Sulfuric Acid (7664-93-9)					X	X		X		

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	N/A	MN0053511	32	05309560	856181-1 856181-2
Issue Date;	N/A	3/2/93	7/1/93	6/21/93	Every yr
Exp. Date:	N/A	12/31/97	6/630/96	12/31/94	Every yr
Regulated Pollutants:	N/A	N/A	N/A	N/A	Permitted (ea): 90 mill/gal/yr
Enforcement Activity:	N/A	N/A	NOV 8/90 NOV 8/91	N/A	N/A
Pollution Points:	N/A	Mississippi River	Mississippi River via storm sewer	N/A	Use Source: Mississippi R.

Notes: The Metropolitan Council has expressed concern over the company's high water use (3 million/gal/day). The notices of violation (NOV) issued by the Metropolitan Waste Control Commission are "paper" violations due to late filing.
N/A = Not Applicable

Minn Par: 900 6th Ave SE, Phn: 379-0603, FAX: 378-3741

Business Information

SIC: 3537 (Forklift swinger loaders and industrial equipment parts) Before 1983, this company was named American Hoist and Derric and then changed to Brothers Inc. The name changed again in 1984 to Continental Diversified Sales and finally to Minn Par in November of 1992. Company moved from site at 1057 10th Ave SE in 1983. President: Emil Kucera Employees: 70 Sales: $5-10M

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	N/A	N/A	30	05300710	N/A
Issue Date;	N/A	N/A	7/1/88	10/24/91	N/A
Exp. Date:	N/A	N/A	6/30/91	11/30/92	N/A
Regulated Pollutants:	N/A	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	N/A	APO 4/92 Criminal Investigation 6/92	N/A
Pollution Points:	N/A	N/A	Mississippi River	N/A	N/A

Notes: Hennepin County hazardous waste division conducted an inspection in 4/92 in response to a complaint of unauthorized dumping of hazardous waste. The inspection revealed over 100 drums stacked in the yard and a lack contingency plan and weekly inspections. APOs were issued at this time requiring remediation of these violations. criminal search warrant was issued in 6/92 and inspectors found soil which smelled of paint thinner although the company president alleged no dumping or spilling occurred. There is an active criminal investigation in progress. vice president, plant manager, and company have all been charged with felonies. The company pled guilty and is presently paying a $20,000 fine. The other two trials are scheduled to begin in 7/94. The company has been ordered complete an investigation to determine whether contamination exists in the soil or groundwater. The investigation not been done yet because it may be self incriminating evidence in the present court case. The facility is operating under an expired license because licenses are not issued to companies involved under criminal investigation. The company has an expired sewer permit due to the criminal case; the file was not available for viewing due to its expiration.

N/A = Not Applicable

New Ashmore 326 6th Ave SE 55418

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	1
Maximum Amount Stored (Range in lbs.)	N/A	10,000-99,999
Chemical: Fuel Oil No. 2		

Private Label Chemicals: 601 2nd St. SE 55414, Phn: 378-1755, FAX: 378-2393

Business Information

SIC: 2844 (Industrial cleaning Compounds) Ownership: Privately owned corporation President: Skye L. VanGrasstek Employees: 14 Sales: $1-5M

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	3
Maximum Amount Stored (Range in lbs.)	N/A	3,000-29,997

Chemicals: 2-Butoxyethanol, Dodecyl Benzene Sulfonic Acid, Sodium Hydroxide

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
PRIVATE LABEL CHEMICALS, INC. jenpriv

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Glycol Ethers	0	0	0	0	0	0	
Phosphoric Acid	0	0	0	0	0	0	
TOTALS	0	0	0	0	0	0	

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Glycol Ethers (110-80-5)			X	X		X				
Phosphoric Acid (7664-38-2)										

Ritrama Duramark: 800 Kasota Ave, 55414, Phn: 378-2277, FAX: 378-9327

Business Information

This facility manufactures graphic arts supplies and pressure sensitive films. SIC: 2759, 2891 (Pressure sensitive materials, Decal stocks, Label Stocks, adhesive systems) Ownership: Regional corporation owned by Ritrama SPA Milan. Formerly named Universal Duramark President: David Bohn Employees: 85 Annual revenue: $37 M

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
RITRAMA DURAMARK jenrit

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Methyl Ethyl Ketone (MEK)	0	17,000	0	0	0	1,400	18,400
Toluene	0	120,000	0	0	0	51,000	171,000
TOTALS	0	137,000	0	0	0	52,400	189,400

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Methyl Ethyl Ketone (78-93-3)			X	X		X	X			
Toluene (108-88-3)			X	X				X		

Pollution Progress Report

They were able to reduce their emissions of both of their released TRI chemicals, toluene, and methyl ethyl ketone, by manufacturing more products using water-based adhesives and less using solvent-based adhesives, which produce the solvent-based emissions. Further reductions are planned.

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	2393-91-OT-1	N/A	N/A	05316160	N/A
Issue Date;	5/16/91	N/A	N/A	2/1/94	N/A
Exp. Date:	5 yrs.	N/A	N/A	12/31/94	N/A
Regulated Pollutants:	TSP, NO_x, CO, HC	N/A	N/A	N/A	N/A
Enforcement Activity:	N/A	N/A	N/A	Citation 1/90	N/A
Pollution Points:	4 emission pts	N/A	N/A	N/A	N/A

Notes: Ritrama reported to the MPCA air quality division that in 1992 they switched from solvent-based operation more water-based raw materials.
N/A = Not Applicable

Rubber Research Elastomerics 824 9th Ave. SE 55414

Tank Leak Site

Leak Id #1179 A spill of mineral spirits of unknown quantity was discovered on 4/22/80. The facility has a history of spills of solvents on soil and into the sewers. The Rubber Research (RR) site was purchased by Future Building Systems (FBS) in 6/89 for residential development. During a re-zoning review, it became clear that RR had installed underground tanks without proper procedures and, also, removed the tanks without proper procedures. The new owners, FBS, began remediation of the site in 1989. The tanks were removed, contaminated soil excavated, and monitoring showed a low level of ground water contamination due to relatively impervious geology of the site. In 10/91, it was discovered that hydrocarbon product had leaked to contaminate property of the Hennepin Business Center (HBC) down gradient from RR. There was completion of soil monitoring requirements at the original site in 7/92. The HBC site is now being investigated.

Superior Plating, Inc.: 325 1st Ave NE, Phn: 379-2121, FAX: 379-4411

Business Information

This facility does electroplating on metals. SIC: 3471 (Metal Finishing all kind) Ownership: Privately owned corporation Chair: E.J. McMonagle, Employees: 45 Annual revenue: $10+M

Chemicals Stored On-Site - 1992 Data

	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	1	17
Maximum Amount Stored (Range in lbs.)	100-999	250,100-2,500,983

Chemicals: Boric Acid, Cadmium Oxide, Chromic Acid, Hydrochloric Acid, Lead, Nickel, Nickel Chloride, Nickel Sulfate, Nitric Acid, Potassium Cyanide, Propane, Sodium Cyanide, Sodium Hydroxide, Sulfuric Acid, Trichloroethane, Zinc, Zinc Chloride Solution, Zinc Peroxide

1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
SUPERIOR PLATING jensup

Chemical name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
Chromium Compounds	255	255	0	0	407	14,330	15,247
Cyanide Compounds	255	255	0	0	353	611	1,474
Hydrochloric Acid	750	750	0	0	0	0	1,500
Nickel and Compounds	255	255	0	0	924	42,891	44,325
Nitric Acid	750	750	0	0	0	0	1,500
Sulfuric Acid	255	255	0	0	0	0	510
Trichloroethylene	46,526	15,509	0	0	0	8,000	70,035
TOTALS	49,046	18,029	0	0	1,684	65,832	134,591

Chemical Name (CAS number)	Carcinogenicity	Genetic and chromosomal mutations	Developmental toxicity	Reproductive toxicity	Acute toxicity	Chronic (system) toxicity	Neurotoxicity	Environmental toxicity	Bioaccumulation	Persistence in the environment
Chromium Compounds (7440-47-3)	X					X		X		
Cyanide Compounds (57-12-5)								X		
Hydrochloric Acid (7647-01-0)					X	X				
Nickel Compounds (7440-02-0)	X		X	X		X		X		
Nitric Acid (7697-37-2)					X					
Sulfuric Acid (7664-93-9)					X	X		X		
Trichloroethylene (79-01-6)	X		X	X		X				

Pollution Progress Report

Trichloroethylene emissions were reduced by improved equipment operation and housekeeping. Their plan calls for reduction in cyanide compound emissions by 1995 by utilizing substitute processes. No reduction goals have et been set for Chromium Compounds, Hydrochloric acid, Nickel, Nitric Acid, or Sulfuric acid.

Accidental (304) Release

Superior Plating, Inc. reported a release on Jan. 20, 1993 of 1200 lbs. of chromic acid into the sanitary sewer system. Material was released from an overflowing tank due to employee fault. Chromic acid has no known health risks. Steps were taken to ensure further releases of the same nature.

History of Environmental Regulation

	Air Permit	Water Permit	Sewer Permit	Haz.Waste	Water Use
Permit #:	12-83-I-1	N/A	135	05315090	756197-1
Issue Date;	7/28/83	N/A	10/1/93	1/1/94	Every yr
Exp. Date:	1 yr.	N/A	8/30/96	12/31/94	Every yr
Regulated Pollutants:	Hexavalent Chromium	N/A	N/A	N/A	Permitted Use: 195 mill/gal/yr
Enforcement Activity:	Stip. Agreement 11/83	N/A	Stip. Agreement 2/85 NOV 7/83, NOV 2/93	N/A	N/A
Pollution Points:	8	Mississippi River	Mississippi River	N/A	Use Source: Mississippi R.

Notes: Superior is operating under an expired air permit due to a backlog. They should have a permit by 1995; the company operates under the levels and requirements of the last one until then. The stipulation agreement between the MPCA and the company in 11/83 required the installation of new scrubbers for the exhaust vents. Superior, also, had a stipulation agreement with the Metropolitan Waste Control Commission in 2/85 to reach compliance for pretreatment standards. MWCC issued a notice of violation (NOV) in 2/93 for high zinc and cyanide levels. During Superior's early operations, untreated plating waste and solvents were disposed of directly into the sewer. In the early 1970s, the sewer pipes broke and the soil underneath the building and the groundwater were heavily contaminated with metal-bearing corrosive wastes ad trichlorethylene (TCE). Groundwater contamination was found in 1982 by MCDA when they sunk wells on property north of the facility. Superior is presently trying to reduce TCE usage by switching to water or citrus-based cleaners. The company has invested heavily in waste water treatment systems and spent over $600,000 on site pollution control. Presently, TCE/Groundwater is pumped out of contaminated wells and the TCE is destroyed by using peroxide ultraviolet light treatment resulting in a 99% destruction of the TCE in the groundwater. The release of chrome into the rain/snow runoff ditch was discovered in the winter of 92/93. the site was evaluated in the summer of 93. As sump pump system was installed which presents further release by pumping the liquid containing the metals through the pretreatment system. Tanks were also checked for leaks and were reinforced. MPCA's air quality division will review with the company the federal chrome-six release standard which will be implemented on 11/94 and the MPCA site response unit will require a n additional will off-site. In 1985 , Superior was made a Superfund site. the facility was ranked 6 out of 100, with 100 being the highest. Is Superior a hazard to public health or the environment? It could be if the TCE plume impacted drinking water wills. However, everyone in the area is connected to city water, and there are no known private wills in the area. Nonetheless, it is considered a threat to groundwater in the area. Most of the soil contamination at the site is under the buildings concrete floor, so people can't contact it directly. There is some potential for contaminated soil is a small area at the back (north) of the building to become airborne, as dust. The seepage on the northwest side of the building is probably of the most concern, because it could come in contact with people or animals and because it could enter the Mississippi River. The relatively high contaminant concentrations in the liquid would be classified as hazardous. Superior is also on the National Priorities List, with a rank of 6 out of 100 (100 being the most serious). The MPCA's Request for Response Action led to installation of a French drain system to remediate groundwater contamination. More equipment is presently being constructed and will be completed this fall. Good Neighbor Project meetings have taken place between Superior and St. Anthony West citizens; while they were receptive to meeting with the neighborhood, the progress of further meeting is unsure.
N/A = Not Applicable

U of MN- Minneapolis. Heating Plant 1180 Main St. SE 55414

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	1
Maximum Amount Stored (Range in lbs.)	N/A	1,000,000-9,999,999
Chemicals: Fuel Oil No. 2		

U.S. West 516 7th Ave SE 55410

Chemicals Stored On-Site - 1992 Data	Extremely Hazardous Substances	Other Chemicals & Hazardous Substs.
Number of Chemicals Stored	0	1
Maximum Amount Stored (Range in lbs.)	N/A	1,000-9,999
Chemicals: Sulfuric Acid		

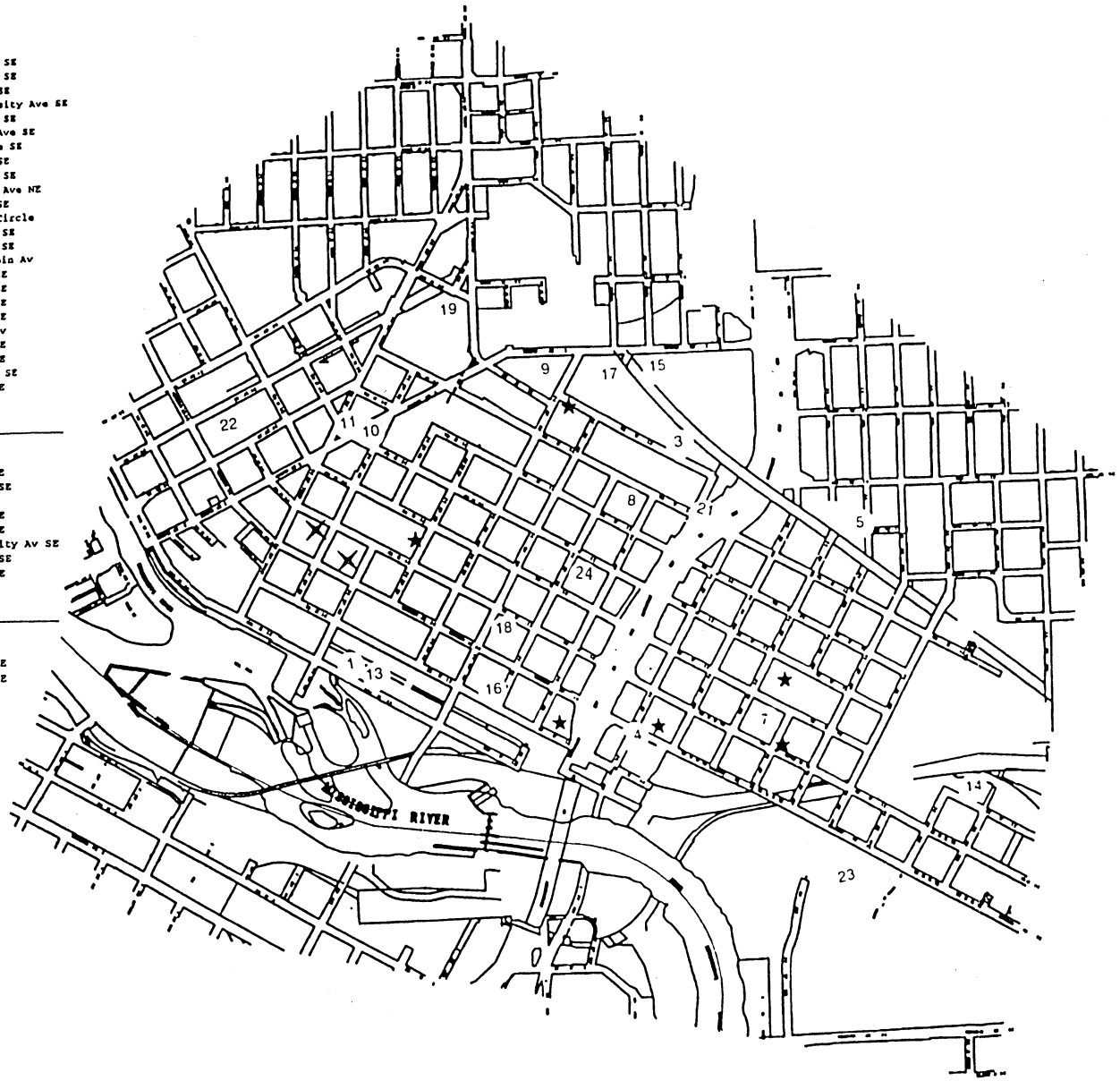
1	ADM/TPC Milling	335 Main St SE
2	American National Can	150 26th Av SE
3	American Spirit Graphics	801 9th St SE
4	Amoco Oil	1000 University Ave SE
5	Bunge Corp/Midway Elevator	917 13th Av SE
6	Busch Industrial Products	770 Kasota Ave SE
7	Chateau Community Housing	425 13th Ave SE
8	Chem Serv	718 8th St SE
9	City Maintenance East Side Yard	935 5th Ave SE
10	Electric Machinery	800 Central Ave NE
11	Holiday Station Store	107 6th St SE
12	Jones Lumber Corp	722 Kasota Circle
13	Manildra Milling	401 Main St SE
14	McLaughlin Gormley King	1715 5th St SE
15	Metallurgical	900 E Hennepin Av
16	Metal-Matic	629 2nd St SE
17	Minn Par	900 6th Av SE
18	New Ashmore	326 6th Av SE
19	Private Label Chemicals	601 2nd Av SE
20	Ritrama Duramark	800 Kasota Av
21	Rubber Research	824 9th Av SE
22	Superior Plating	325 1st Av NE
23	U of MN-Mpls. Heating	1180 Main St SE
24	US West	516 7th Av SE

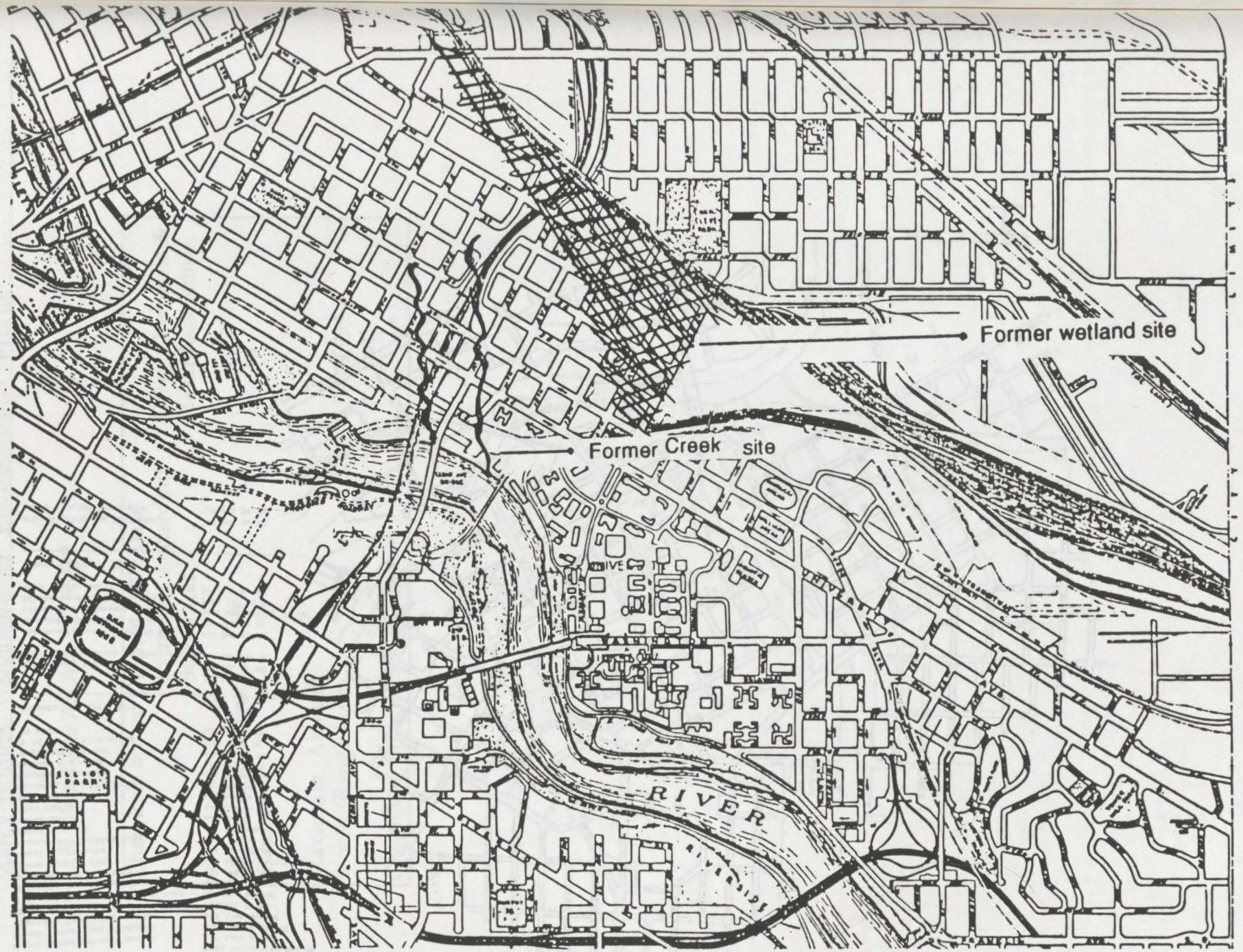
Schools/Day Care ★

Marcy Open School	415 4th Av SE
Heart of the Earth Survival School	400 13th Av SE
Children's World/Learning Tree	807 2nd St SE
Eastside Child Dev. World	830 5th Av SE
Little Haven Nursery School	1013 University Av SE
Miniapple Int'l Montessori	1215 5th St SE
Mpls. Kids- Marcy	415 4th Av SE

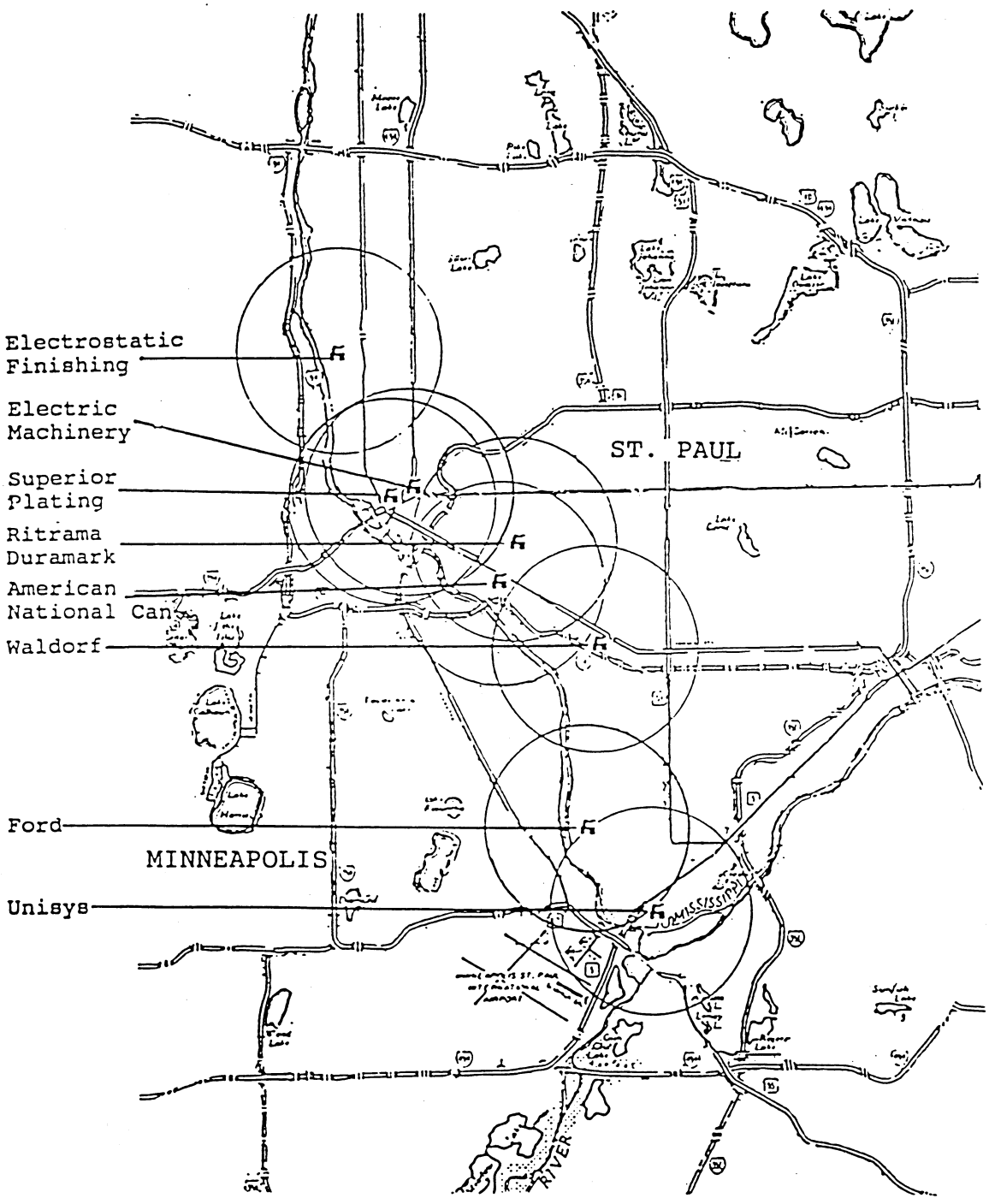
Senior Citizens ✗

MCDA Housing for the Elderly	320 2nd Av SE
Labor Retreat Apartments	124 4th St SE

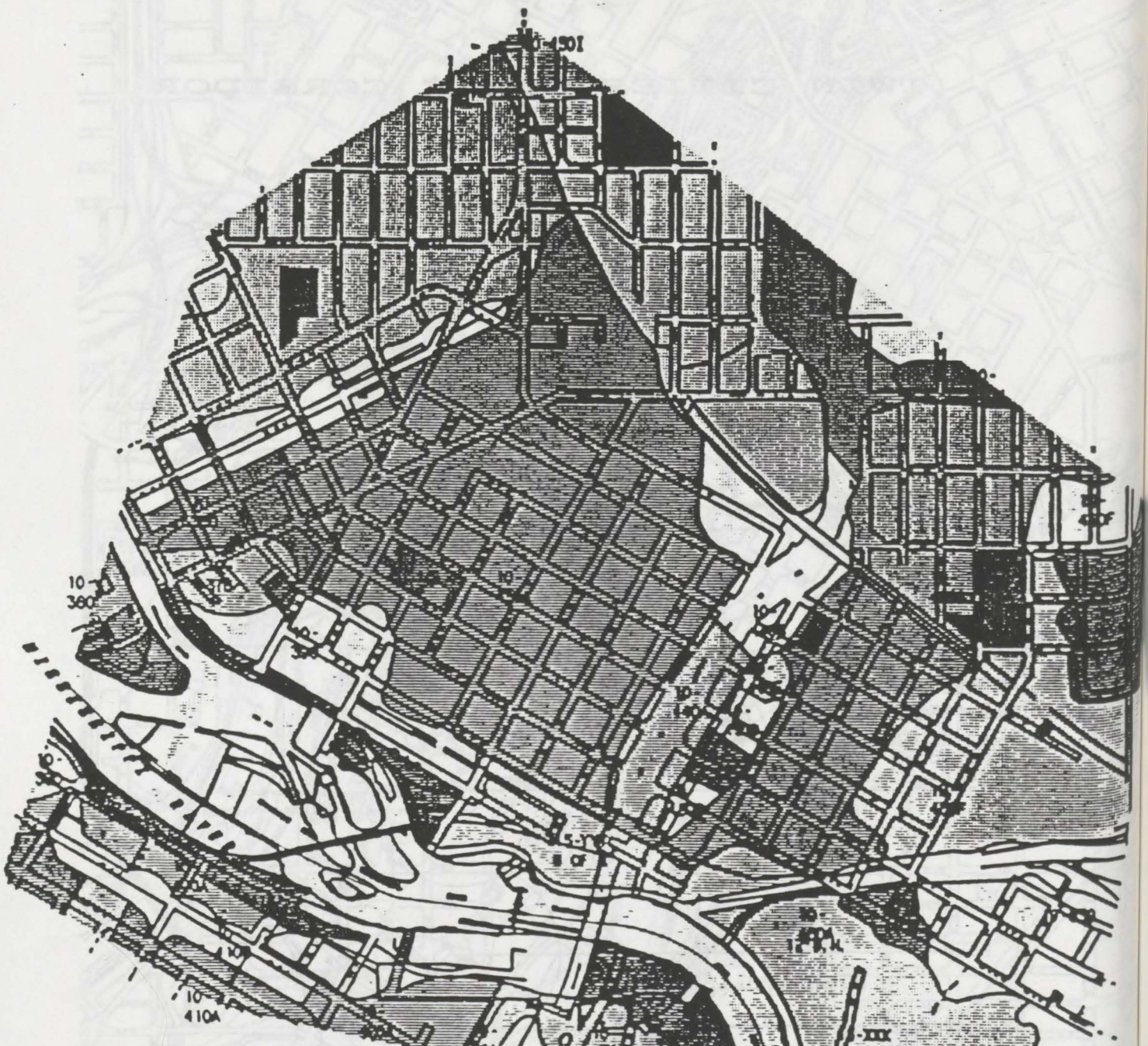



Former wetland site
Former Creek site
RIVER

TWIN CITIES TOXIC CORRIDOR



STORM WATER RUNOFF DRAINAGE BOUNDARIES



Appendix E
Minneapolis Storm Water Outfall Inventory

Outfall	Location	Pipe	Total Acres	Land Use
10-320	3rd Ave NE	84"	342	65 % res., 12% comm., 10% ind., 6% open, 4% public, 3% rail
10-350	1st Ave NE	36"	28	50% comm., 50% ind.
10-390	3rd Ave SE	tunnel	42	58% ind., 26% comm., 13% res., 2% rail, 1% open
10-440A	35W btwn University Ave SE & 4th St SE	18"	23	65% res., 15% comm., 11% ind., 9% open
10-440B	35W @ 9th St SE	18"	34	56% res., 21% comm., 23% public
10-450A	10th Ave SE @ 2nd St SE	18"	338	50% res., 21 % ind., 16% comm., 6% rail, 4% open, 3% public
10-450B	10th Ave SE 50' N of Univ. Av SE	18"	3	56% res., 20% comm., 24% public
10-450C	10th Ave SE 50' N of 4th St SE	18"	56	90% res., 10% ind.
10-450D	10th Ave SE @ 5th St SE	18"	5	100% res.
10-450E	10th Ave SE @ 6th St SE	18"	3	98% res., 2% open
10-450F	8th St SE @ 15th Ave SE	18"	159	38% ind., 31% comm., 19% rail, 10% res., 2% open
10-460B	Univ Av SE 100' SE of 14th Ave SE	18"	7	70% comm., 11% rail, 10% public, 9% res.

Appendix F
Health Effects of TRI chemicals

Facts are a summary source of information of all potential and most severe health hazards that may result from exposure. Duration of exposure, concentration of the substance and other factors will affect your susceptibility to any of the potential effects described.

Copper- CAS #7440-80-8- Dust or fumes can affect you when breathed in, can irritate the eyes, nose, and throat. Eye contact with particles of Copper metal can cause a severe reaction that can lead to blindness. Copper fumes may cause "metal fume fever". This a flu-like illness with symptoms of metallic taste, fever and chills, aches, chest tightness and cough. Copper may cause an allergic skin rash. Copper may form metal fumes which present different hazards than the substance itself. The toxicity of copper and its compounds to aquatic life varies with the physical and chemical conditions of the water at higher than normal concentrations it is toxic to aquatic life.

Methanol-#67-56-1- Colorless liquid with a strong odor, it is used as a solvent and cleaner. Can affect you when breathed in and by passing through your skin, exposure can cause blindness, may damage the liver, exposure to high concentrations can cause headaches, nausea, vomiting and dizziness, can cause death. Repeated or prolonged contact can cause dryness and cracking of the skin. Flammable Liquid, Fire Hazard. Odor threshold = 100 ppm. The odor threshold only serves as a warning of exposure. Not smelling it does not mean you are not being exposed.

Toluene-#108-88-3- Can affect when breathed in and by passing through skin. May cause mutations. May damage developing fetus, Flammable and Fire Hazard- can irritate nose, throat, and eyes, higher levels can cause dizziness, light-headed, and passing out, death can occur. Repeated exposures can cause damage to bone marrow causing low blood cell count. It can also damage the liver and kidneys. Toluene can cause slowed reflexes, trouble concentrating, and headaches, prolonged contact can cause a skin rash. Colorless liquid with a sweet pungent odor, used as a solvent and in making other chemicals.

Methyl Ethyl Ketone- #78-93-3- Can affect when breathed in and by passing through skin, should be handled with extreme causation. Exposure can cause dizziness, headache, blurred vision, and passing out. Repeated exposure, along with other solvents, can damage the nervous system. The liquid can severely burn the eyes and may irritate skin. Repeated exposure can cause drying and cracking of the skin. The vapor can irritate the eyes, nose, ,mouth, and throat. Flammable. Clear, colorless liquid with a fragrant mint-like odor. Odor threshold + 5.4 ppm,/ Odor threshold only serves as a warning of exposure. Not smelling it does not mean you are not being exposed.

Chromium- #7440-47-3- Can affect when breathed in, Carcinogen, metal ore has been reported to cause lung allergy, fumes can cause "metal fume fever", particles can irritate the eyes. It is a metal often found as a powder. Chromium is a Cancer Causing Agent in humans. There may be no

safe level of exposure to a carcinogen, so all contact should be reduced to the lowest possible level. High Toxicity to aquatic life.

Nickel- #7440-02-0- Dust and fumes can affect when breathed in- Carcinogen (associated with nickel refining), skin contact may cause skin allergy, with itching, redness and later rash. Lung allergy occasionally occurs with asthma type effects. High exposure can cause cough, shortness of breath and fluid in lungs, sometimes delayed after the exposure for 1 to 2 days. Highly Flammable Solid, Dangerous Fire, Explosion Hazard, probable carcinogen in humans. High toxicity to aquatic life.

Sulfuric Acid-#7664-93-9- Can affect when breathed in, corrosive chemical, can severely burn the skin and eyes. It can cause third degree skin burns and blindness on contact. Exposure to mist can irritate eyes, nose, throat, and lungs, causing coughing, chest tightness and sneezing. Higher levels can cause a buildup of fluid in the lungs (pulmonary edema), a medical emergency. Repeated exposures can cause permanent lung damage and damage teeth. Reactive Chemical. Explosion Hazard.

Trichloroethylene- #79-01-6- Can affect when breathed in. Handle as a CARCINOGEN with extreme caution. Exposure can cause dizziness and passing out, an irregular heartbeat leading to sudden death. High levels may cause brain damage and death, repeated exposure can cause fatigue,, memory loss, headache, irritability, mental confusion, and depression. Can cause damage to liver and kidneys, high exposure can irritate the lungs. Prolonged contact can burn the skin. Colorless liquid with sweet odor. Cancer causing agent and mutagen. Odor threshold is 28 ppm.

Zinc- #7440-66-6- Can affect you when breathed in, dust particles can irritate the eyes, exposure to solid zinc may give off zinc oxide fume which can cause health effects, metal fragments can scratch the eyes. High toxicity to aquatic life.

Appendix G

Definitions of Toxic Chemical release Inventory (TRI) Media

Fugitive air- Releases that do not through stack vents, pipes, ducts, or any other confined air stream. Examples include leakage from valves, end lines, evaporative losses from surface impoundments, and production lines, and releases from building ventilation systems.

Stack air- Releases which do go through stacks, vents, ducts, pipes, or other confined air streams, including storage tank emissions and air releases from control equipment.

Land- Releases to land on-site within the boundaries of the facility including landfills, land, surface impoundment, treatment/application farming, etc.

Water- Discharges to rivers, streams or other water bodies. Releases from on-site wastewater treatment systems and the contribution of stormwater runoff are included, if applicable.

Sewer- Discharges to a waste water treatment facility which is owned by a unit of government.

Shipped Off-Site- Wastes sent outside the boundaries of a facility for treatment or disposal.

Appendix H

Definitions of Human Health and Environmental Effects

Carcingenicity- chemicals known or suspected of causing cancer in humans or laboratory animals.

Genetic and chromosomal mutations- chemicals with the potential to produce changes in genetic material that can be inherited by off spring.

Developmental toxicity- chemicals that can cause birth defects, miscarriage, growth retardation, mental retardation, and/or learning disorders.

Reproductive toxicity- chemicals that can damage reproductive ability such as mating behavior, conception and lactation.

Acute toxicity- chemicals capable of causing serious health effects or death from short term exposure.

Chronic toxicity- chemicals that can cause adverse health effects, other than cancer, from long term exposure.

Neurotoxicity- chemicals that can adversely affect the structure or function of the nervous system, including the brain, spinal cord, and nerves.

Environmental toxicity- chemicals that can adversely affect the health of the environment, including plants and animals.

Bioaccumulation- chemicals known to accumulate in plant or animal tissues and capable of moving through the food chain.

Persistence in the environment- chemicals that do not readily convert non-toxic form when released into the environment.

MARCY-HOLMES NEIGHBORHOOD

REGULATED SOURCES OF POLLUTION AND WATER USERS

jenreg

COMPANY	ADDRESS	ZIPCODE	COMMUNITY RIGHT TO KNOW: TOXICS RELEASE INVENTORY	CHEMICALS ON-SITE	ACCIDENTAL RELEASES	AIR PERMIT	HAZARDOUS WASTE	WATER PERMIT	SEWER PERMIT	WATER USERS	CONTAMINATED SITES
ADM/TPC Milling	335 Main St. SE	55414	X	X					X	X	
American National Can Co	150 26th Ave SE	55414	X	X		X	X	X	X	X	
Amercan Spirit Graphics	801 9th St. SE	55414				X	X		X		
Amoco Oil SS #6278	1000 University Ave SE	55414		X							X
Bunge Corp/Midway Elevator	917 13th Ave. SE	55414				X					
Busch Industrial Prod	770 Kasota Ave SE	55413		X							
Chatteau Comm Housing Assoc	425 13th Ave SE	55414		X							X
Chem Serv Inc	715 8th St. SE	55414		X							
City Maintenance East Side Yd	935 5th Ave SE	55414									X
Dresser Rand/Electric Mach	800 Central Ave. NE	55413	X	X		X	X		X		
Holiday Stationstore #9	107 6th St. SE	55414		X							
Jones Lumber Corp	722 Kasota Circle	55413				X					
Manildra Milling	401 Main St. SE	55414				X			X		
McLaughlin Gormley King Co	1715 5th St. SE	55414	X	X	X		X		X		X
Metallurgical, Inc.	900 E. Hennepin Ave	55414	X	X			X			X	
Metal-Matic, Inc.	629 2nd St. SE	55414	X	X			X	X	X	X	
Minn Par	900 6th Ave. SE	55414					X		X		
New Ashmore	326 6th Ave. SE	55414		X							
Private Label Chemicals	601 2nd St. SE	55414	X	X							
Ritrama Duramark	800 Kasota Ave	55414	X			X	X				
Rubber Research Elastometrics	824 9th Ave. SE	55414									X
Superior Plating	325 1st Ave. NE	55413	X	X	X	X	X		X	X	X
U of MN- Mpls Heating Plant	1180 Main St. SE	55414		X							
U.S. West	516 7th Ave. SE	55414		X							
TOTALS			9	16	2	8	9	2	9	5	6

MARCY-HOLMES NEIGHBORHOOD
TOXIC CHEMICAL RELEASE INVENTORY (TRI) REPORTERS
1992 TRI RELEASES AND TRANSFERS (IN POUNDS)
RANKED BY CHEMICAL AMOUNT

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Facility Name	Fugitive Air	Stack Air	Land	Water	Sewer	Shipped Offsite	Chemical Totals
American National Can Co	59,843	111,136	0	0	0	105,998	276,977
Ritrama Duramark	0	137,000	0	0	0	52,400	189,400
Superior Plating	0	49,046	18,029	0	1,684	65,832	134,591
Dresser Rand/Electric Machinery	2,005	74,005	0	0	0	0	76,010
McLaughlin Gormley King Co	17,800	18,900	0	11	0	29,400	66,111
ADM/TPC Milling	15,470	0	0	0	0	0	15,470
Metallurgical, Inc.	0	3,600	0	0	0	0	3,600
Metal-Matic	0	0	0	0	0	0	0
Private Label Chemicals, Inc.	0	0	0	0	0	0	0
TOTALS	95,118	393,687	18,029	11	1,684	253,630	762,159

MARCY-HOLMES NEIGHBORHOOD
TOXIC CHEMICAL RELEASE INVENTORY (TRI) REPORTERS
KNOWN POTENTIAL HUMAN AND ENVIRONMENTAL EFFECTS OF TRI CHEMICALS
1992 TRI RELEASES AND TRANSFERS (IN POUNDS) BY TYPE OF TOXICITY

jenpot

FACILITY NAME	CARCIN.	GENETIC	DEVELOP.	REPRO.	ACUTE	CHRONIC	NEURO.	ENVIRO.	BIOACCUM.	PERSIST.
ADM/TPC Milling	0	0	0	0	15,470	0	15,470	0	0	0
American National Can Co	0	0	276,477	276,477	0	94,799	58,457	148,864	36,342	128,113
Dresser Rand/Electric Machinery	0	0	76,010	76,010	76,000	76,000	0	76,010	10	76,000
McLaughlin Gormley King Co	0	0	7,111	7,111	59,000	0	59,000	7,111	0	0
Metallurgical, Inc.	0	0	0	0	3,600	3,600	0	0	0	0
Metal-Matic	0	0	0	0	0	0	0	0	0	0
Private Label Chemicals, Inc.	0	0	0	0	0	0	0	0	0	0
Ritrama Duramark	0	0	189,400	189,400	0	18,400	18,400	171,000	0	18,400
Superior Plating	129,607	0	115,834	114,360	64,556	133,091	71,509	61,736	0	70,035
	129,607	0	664,832	663,358	218,626	325,890	222,836	464,721	36,352	292,548

Appendix L
Resources

Several publications that were unparalleled in their store of useful information and helpful guidelines :

-Get to Know Your Local Polluter: Profiles of Minnesota's Top 40 Toxic Polluters, published by Citizens for a Better Environment in January 1993. This report gives a brief profile of the top toxic polluters, most located in the metro area, and also provides detailed tips and instruction on how to start acting on toxic polluters in your own area.

-Environmental Inventory: Prepared for the Mississippi Corridor Neighborhood Coalition in March 1994. This study identified all of the sources of pollution in that section of the river corridor. The conclusion of the report said that non-point source pollution and urban runoff were the largest threat to the river.

-Minneapolis Neighborhood Environmental Profile: Prepared for the Neighborhood Environmental Partnership in Dec. 1993. This profile provides some basic environmental facts for the city of Minneapolis but also provides some interesting tips on ways to start thinking about this information.

-**Burlington Northern Railroad**, Phn: 490-6160

-**Citizens for a Better Environment**, 3255 Hennepin Ave., So. #150, Minneapolis 55408, Phn: 824-8367
Get to Know Your Local Polluter, Good Neighbor Project

-**Hennepin County Department of Environmental Management**, 417 N. 5th St., Minneapolis 55401, Phn: 348-4919, Fax: 348-8532
Hazardous waste generators, transporters, and disposers

-**Metropolitan Waste Control Commission**, 230 E. 5th St. St. Paul, 55101, Phn: 222-8423, Fax: 229-3138
Sewer permits- 772-7010

-**Minneapolis City Hall**, 350 5th St. S, 55415
Publication: State of the City (Yearly)
Planning Department- Traffic Counts, Environmental Commission- 673-2347

-**Minneapolis Environmental Section**, Inspections Division, Department of Regulatory Services, 250 S. 4th St. Minneapolis 55415, Phn: 673-5897 Fax: 673-5819
Publication: Minneapolis Neighborhood Environmental Profile

-**Minneapolis Parks and Recreation Board,** Phn: 661-5750
Parkland locations, neighborhood tree survey

-**Minneapolis Public Works,** 309 2nd Ave. S, Phn: 673-5750
Storm Water Drainage- 673-3626
Maps- 673-2431
Solid Waste and Recycling- 673-2443

-**Minnesota Department of Natural Resources,** 500 Lafayette Rd St. Paul, Phn: 296-6157
Ground and Surface Water Users- 297-3899

-**Minnesota Emergency Response Commission,** 175 Bigelow Bldg, 450 N Syndicate St., St. Paul, 55104, Phn: 643-3000, Fax: 643-3005
Toxic Chemical Release Inventory (TRI), Chemical Storage Inventory, Health and environmental effects of TRI chemicals, Accidental releases

-**Minnesota Historical Society,**
Historic maps of area before development

-**Minnesota Office of Waste Management-** 1350 Energy Lane, St. Paul 55108, Phn: 649-5750
Pollution Prevention Community Assistance Program

-**Minnesota Pollution Control Agency,** 520 Lafayette Rd, St.Paul, 55155, Phn: 296-6300 Fax: 297-1456
Air Quality Division- air permits, auto emissions- 297-5367
Ground Water and Solid Waste Division- superfund sites, hazardous waste sites, 297-2731
Water Quality Division- water permits- 296-7202
Environmental Analysis Office- pollution prevention progress reports- 378-8190
Tanks and Spills Division- Storage tank leaks, hazardous spills- 297-8575

-**Minnesota Technical Assistance Program (MnTAP),** 1313 5th St SE Ste 207, 55414, Phn: 627-4646
Assistance programs for pollution prevention in businesses

-**Mississippi Corridor Neighborhood Coalition,** 2427 2nd St. NE, Minneapolis, 55418, Phn: 788-5098
This federation of neighborhoods, formed in 1993, seeks to preserve, protect, enhance, and restore the Mississippi River to serve the interests of neighborhood residents and others. While their primary interest is the section beginning just north of Marcy-Holmes (North of East Hennepin),

they are definitely working n things which affect and would be interesting to residents of this neighborhood. The membership of the coalition is open and welcomes anyone interested.

-University of MN, Wilson Library

Business information: Directory of Minnesota Manufacturers, Corporate Report Fact Book, Minnesota Manufacturers' Register

-U.S. Army Corps of Engineers, 290-5360

Historic Maps, Projects on the river (construction), lock use

Appendix M
Glossary

APO- Administrative Penalty Order. A non-negotiable penalty levied by the Minnesota Pollution Control Agency and limited to a $10,000 maximum.

CAA- Clean Air Act. A federal law which requires companies to get a permit to pollute the air. Regulate releases are called criteria and toxic pollutants.

Cas Number- The American Chemical Society's Chemical Abstract Services unique number for each chemical; a given chemical may have more than one name but only one CAS number.

CWA- Clean Water Act. A federal law which requires companies to get a permit to pollute the water. Regulated pollutants are called priority pollutants.

EHS- Extremely Hazardous Substance- The EHS list is a subcatagory of hazardous chemicals defined by the Occupational Safety and Health Act (OSHA) and currently contains 366 chemicals which present immediate (acute) health hazards.

Emission point- a stack, chimney, vent, or other functionally equivalent opening whereby emissions are exhausted to the atmosphere.

EPA- U.S. Environmental Protection Agency. This is the federal agency responsible for administering a wide range of environmental laws, such as Emergency Planning and Community Right-To-Know Act (EPCRA), the Clean Air Act (CAA), the Clean Water Act (CWA), and the Resource Conservation and Recovery Act (RCRA).

EPCRA - Emergency Planning and Community Right-To-Know Act. This law is Title III of the 1986 Superfund Amendments and Reauthorization Act (SARA). It is intended to improve emergency planning for chemical accidents and gave the public broad new rights to find out about potential chemical hazards in their communities. Section 313 of EPCRA contains the Toxic Chemical Release Inventory (TRI) requirements.

ERC- Minnesota Emergency Response Commission. This is the state agency responsible for the administering the Emergency Planning and Community Right-To-Know Act (EPCRA) in Minnesota. This includes collecting data, for and publishing, the Toxic Chemical Release Inventory (TRI).

MPCA- Minnesota Pollution Control Agency. This agency is responsible for enforcing a wide range of environmental laws such as the Clean Air Act (CAA), the Clean Water Act (CWA), and the Resource Conservation and Recovery Act (RCRA). Progress Reports required by the Minnesota Toxic Pollution Prevention Act (TPPA) are submitted to the MPCA.

NOV- Notice of Violation. A notice sent by the MPCA to a permit holder suspected of violating its permit which requires a response within 30 days or further enforcement action may be taken.

NO_X- Nitrogen Oxides. A category of air pollutants defined and regulated by the Clean Air Act.

NPDES- National Pollutant Discharge Elimination System. the national program established unser the Federal Water Pollution Control Act, which requires all point source dischargers into any body of water to be permitted by the EPA or the designated state agency. Mininmum pretreatment requirements for such dischargers are estalished under the program.

OCHS- Other chemicals and hazardous substances. Defined for this report as any chemicals and substances not classified as extremely hazardous. This broad classification includes hundreds of chemicals and substances ranging from wastewater, paints, and solvents, to acids, gases, and petroleum products.

Opacity- a measure of air pollution based on the darkness of smoke coming out of the stack.

OSHA- Occupational Safety and Health Act. The federal and state laws which govern workplace safety. Also stands for the Occupational Safety and Health Administration which is the agency responsible for administering the act.

Petrofund- Petroleum Tank Compensation Fund. Minnesota created in 1987 to encourage tank owners to clean up contaminated soil and groundwater resulting from undergound storage tank leaks.

PM- Particulate matter under 10 microns in diameter. A category of air pollutants defined and regulated by the Clean Air Act.

RCRA- Resource Conservation and Recovery Act. The primary federal law governing hazardous and nonhazardous (garbage) waste.

SIC codes- Standard Industrial Classification codes. A system that the federal government uses to classify U.S. businesses according to the products they produce or services they offer.

SO_2- Sulfur Dioxide.

Stipulated Agreement- A legally enforceable negotiated agreement between the EPA, or a state agency, and a violator of federal or state laws.

TPPA- 1990 Minnesota Toxic Pollution Prevention Act. This law requires Minnesota TRI reporters to prepare pollution prevention plans every two years, report annually on progress, and pay a two cents per pound fee on TRI emissions.

TRI- Toxic Chemical Release Inventory. An annual inventory, in pounds, of about 320 chemicals which manufacturers nationwide report releasing to air, water, or land and/or transferring off-site as hazardous waste. The reports are submitted to the Minnesota ERC and the U.S. EPA. TRI provisions are found in section 313 of the EPCRA.

TSP- Total Suspended Particles. A category of air pollutants regulated by the Clean Air Act.

VOC- Volatile Organic Compounds. A large class of chemicals regulated by the Clean Air Act which , along with nitrogen oxides from ozone, or smog, when exposed to sunlight.